**CSE 30 – ARM worksheet 1**



1. True or False: registers don’t have addresses, they only have names

2. What does this statement do? add r0, r1, r2

A. r0 = r1 + r2 B. r2 = r0 + r1



3. What does load do as an ARM instruction?



A. get data from memory to registers B. store data from register to memory



4. Write an assembly code to add three values and print out their sum. Assume that the values we want to add are in r0, r1, and r2

.cpu cortex-a53

.syntax unified



.arch armv6

.section .rodata

fmt: .asciz "%d\n"

.section .text

.align 2

.equ FP\_OFFSET, 4

.type main, %function

.global main

main:

push {fp, lr}



add fp, sp, FP\_OFFSET

**//assign 7 to r0**

**//assign 8 to r1**

**//assign 20 to r2**



**//perform r0= r0+r1+r2**



mov r1, r0

ldr r0, =fmt

bl printf



mov r0, 0

sub sp, fp, FP\_OFFSET



pop {fp, lr}

bx lr

.end